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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,646	11/21/2003	Takefumi Okumura	500.42907PX1	9131

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EXAMINER	
WEINER, LAURA S	

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,646	OKUMURA ET AL.	
	Examiner	Art Unit	
	Laura S. Weiner	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 10/623,497.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5-05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishiura et al. (EP 1 160 268).

Nishiura et al. teaches on page 3, a cell comprising a polymeric electrolyte comprising an ionic-conductive polymeric compound containing one or more trivalent boron atoms. Nishiura et al. teaches on page 16, Example A-1 teaching the claimed invention where Y is an acryloyl group and q1=0. Nishiura et al. teaches on page 10, that the electrolytic salt can be LiBF4, LiClO4, LiPF6, etc. Nishiura et al. teaches on page 40, claims 30-31, a cell comprising a positive electrode made of a double metal oxide and a negative electrode comprising a lithium metal, etc. which is linked through the polymeric electrolyte.

3. Claims 1-2, 7-8 are rejected under 35 U.S.C. 102(a) as being anticipated by Yokoyama et al. (JP 2002-348323, translation and abstract) or Yokoyama et al. (WO 03/031453, abstract).

Yokoyama et al. ('323) teaches a polymerizable compound with high conductivity which is useful as a material for electrochemical devices such as secondary battery and used in an electrolyte. The polymerizable borate compound is obtained by esterification of a polymerizable compound represented by Formula (1) XO(AO)nH, where X is an acryloyl group or a methacryloyl group; AO is a 2-4 C oxyalkylene group and n=1-100 with boric acid or boric acid anhydride. Yokoyama et al. teaches on page 5, [0024] of the translation that the salts can be LiClO4, LiAsF6, LiPF6, LiBF4, etc.

Yokoyama et al. ('453) teaches a secondary battery employing an electrolyte comprising a boric ester compound which comprises reacting a compound represented by Formula (1) with a boron compound represented by formula (2). In formula (1) the X group can be an acryloyl or a methacryloyl. Yokoyama et al. teaches on page 24 of the patent that the salts can be LiClO4, LiAsF6, LiPF6, LiBF4, etc.

4. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokahama et al. (6,833,220).

Yokoyama et al. teaches a secondary battery comprising an electrolyte comprising an ionic compound and an organic polymer compound wherein the organic polymer compound comprises a boric acid ester compound obtained by the estification of the compound represented by Formula (1) with boric acid or boric anhydride.

Yokoyama et al. teaches in column 34, an electrolyte for a battery comprising Formula (2) Z2-[(A2O)m-R2]b where R2 represents a group represented by Formula (3). Yokoyama et al. also teaches in columns 33-34, claim 1 and 7, an electrolyte for a battery comprising Formula (1) Z1-[(A1O)l-R1]a and further comprises a polymerization product of the compound of Formula 4 where R5 represents a group represented by Formula (5). Yokoyama et al. teaches in column 11, that the salts can be LiClO4, LiAsF6, LiPF6, LiBF4, etc.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-2 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6, 9, 11, 13 of U.S. Patent No. 6,998,465.

Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S. Patent No. 6,998,465 claims a secondary battery comprising an electrolyte comprising a boric acid ester compound obtainable by esterifying the compound of formula (1) with a boron-containing compound of Formula (2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura S Weiner
Primary Examiner
Art Unit 1745

November 29, 2006